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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,877

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Zigun Zhao

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EXAMINER

MINSKEY, JACOB T

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

03/31/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,877	Applicant(s) ZHAO, ZIGUN	
	Examiner JACOB T. MINSKEY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 3-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Both claims 3 and 4 include the limitation of a "natural botanical prescription without acidity-alkalinity agent." There is not sufficient explanation in the claims or in the instant specification for one of ordinary skill in the art to understand the scope of this limitation.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 3 recites the limitation "said degumming softening agent" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa, JP 09176965 A in view of publication by Xhmary.com.

9. Regarding claim 1, Hasegawa teaches a cloth product to be used in clothing made of bamboo without the use of a chemical testing agent (see abstract). Hasegawa is silent on the average fineness of the bamboo fiber, but it would have been obvious to one of ordinary skill in the art at the time of the invention to select a high fiber count for the production of clothing for the benefit of a softer and stronger fabric.

10. In the same filed of endeavor of bamboo fiber manufacturing, Xhmart provides the specifications of the bamboo fibers that can be used in the textile industries (see

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paragraph 6) that include an average fineness of 1686 metric counts (see chart 2) and controlling the length of the natural bamboo fiber depending on the fibers purpose (original fiber and a short fiber, paragraph 5). It would have been obvious to utilize a fabric with an average fineness in the claimed range because applying a known technique to a known device (method, or product) ready for improvement to yield predictable results is within the ability of one of ordinary skill in the art.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao, CN 1302718 A, as provided by a written translation by the USPTO, in view of Wise, USP 2,440,562.

12. Regarding claim 2, Cao teaches a manufacturing process of a bamboo fiber comprising the steps of raw material pretreatment, bamboo fiber decomposition, bamboo fiber formation and a bamboo fiber post-treatment (see figure 1), wherein said raw material pretreatment comprises the steps of material organization, bamboo stripping and soaking (page 5 lines 12-21), wherein said bamboo fiber decomposition comprises steps of boiling, rinsing and fiber separation (page 5 line 21- page 6 line 2), wherein said bamboo fiber formation comprises the steps of boiling, fiber separation, fiber restore, fiber dehydration and fiber softening (figure 1 items 7-9), wherein said bamboo fiber post treatment comprises the steps of drying, fiber sorting, selection and inspection (figure 1 items 10-13).

13. Cao does not teach to repeat the digestion steps in at least three cycles. It would have been obvious to one of ordinary skill in the art at the time of the invention to duplicate the digestion cycle multiple times, since it has been held that a mere

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duplication of working parts of a device involves only routine skill in the art (In re Harza, 274 F 2d 559, 124 USPQ 378 (SSPA 1960)).

14. Additionally, in the same field of endeavor of obtaining fibers of bamboo like plants, Wise teaches that it has long been known that fibers removed from plants like ramie, Chinagrass, and bamboo requires repeated washings and kneading to remove the gummy substance of the fibers (column 1 lines 28-37).

15. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wise's teachings of multiple washing and kneading cycles to the Cao method for the benefit of removing all the gum of the fibers before processing into further uses.

16. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao, CN 1302718 A as provided by a written translation by the USPTO in view of Wise, USP 2,440,562 and in further view of Manahan, USP 2,026,584.

17. Regarding claims 3 and 4, Cao and Wise remain as applied above and Cao further teaches the process of soaking and boiling the bamboo fibers in 100 degrees C water for at least 20 minutes as a degumming softening agent to perform sugar removal, fat removal and sterilization (page 5 lines 21-23), and compacting the bamboo (page 5 line 19), but does not teach the addition of other additives other than water.

18. In the same field of endeavor of liberating fibers of bamboo like plants (column 1 lines 5-13), Manahan teaches that the soaking and boiling of fibers is performed in a water and natural soap mixture (preferably greater than 1 %, column 2 line 61- column 3 line 3), the addition of a strengthening agent (column 3 line 34-35), and the addition of a

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natural softener of neutral pH (coconut oil without any acid or basic components added, column 3 line 69) in a later cycle of soaking, boiling, and rinsing.

19. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the natural agents described by Manahan in the Cao method for the benefit of treating the bamboo without use of harsh chemicals that can harm the environment.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

21. USP 4,857,145 to Villacivencio teaches a process of pulping bamboo fibers with multiple digestions.

22. USP 2,530,244 to Jensen teaches a process of degumming ramie fibers through long soaking and boiling cycles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB T. MINSKEY whose telephone number is (571)270-7003. The examiner can normally be reached on Monday to Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTM

/Eric Hug/
Primary Examiner, Art Unit 1791